

Patent claims

1. A planar implant comprising a planar support with  
5 two faces, at least one face of the support being  
provided with an absorbable adhesive layer which  
is able to adhere to human or animal tissue.
2. The implant as claimed in claim 1, characterized  
10 in that the adhesive layer is essentially formed  
from at least one polymer which carries free  
aldehyde groups and whose aldehyde groups are able  
to react with nucleophilic groups of the tissue,  
and it in particular has anti-infective  
15 properties.
3. The implant as claimed in claim 1 or 2,  
characterized in that the adhesive layer at least  
partially covers, preferably completely covers,  
20 the at least one face of the support.
4. The implant as claimed in one of claims 1 through  
3, characterized in that the adhesive layer is  
designed to cover the planar support only around  
25 the edges and/or to protrude beyond the edges of  
the planar support.
5. The implant as claimed in one of the preceding  
claims, characterized in that the adhesive layer  
30 is provided on both faces of the support.
6. The implant as claimed in one of claims 1 through  
4, characterized in that the support has an  
adhesive layer on one face and preferably has an  
35 anti-adhesive layer on the other face.
7. The implant as claimed in claim 6, characterized  
in that the anti-adhesive layer has a closed and  
in particular smooth surface.

8. The implant as claimed in one of the preceding claims, characterized in that the adhesive layer is designed as an open layer and is in particular absorbent.  
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9. The implant as claimed in one of the preceding claims, characterized in that the adhesive layer is hydrophilic and in particular is able to take up aqueous fluids by swelling.  
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10. The implant as claimed in one of the preceding claims, characterized in that the adhesive layer is present in the form of a nonwoven, in particular a three-dimensional nonwoven.  
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11. The implant as claimed in one of claims 1 through 9, characterized in that the adhesive layer is present in the form of an open-cell foam.  
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12. The implant as claimed in one of claims 2 through 11, characterized in that the polymer carrying aldehyde groups is soluble in water.
- 25 13. The implant as claimed in one of claims 2 through 12, characterized in that the polymer carrying aldehyde groups is an oxidized, in particular bioabsorbable polysaccharide.
- 30 14. The implant as claimed in claim 13, characterized in that the oxidized polysaccharide is one from the group comprising starch, cellulose, agar, dextran aldehyde, hyaluronic acid, alginic acid, chondroitin sulfate, and preferably dextran polyaldehyde.  
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15. The implant as claimed in claim 14, characterized in that the proportion of glucose units oxidized to the aldehyde in the dextran polyaldehyde is at

least 20%, preferably 35 to 100%, in particular 50 to 85%.

16. The implant as claimed in one of claims 2 through 5, characterized in that the polymer carrying aldehyde groups is an in particular branched polyethylene glycol with at least three terminal aldehyde groups.
- 10 17. The implant as claimed in one of claims 2 through 12, characterized in that the polymer carrying aldehyde groups is an in particular branched polyvinyl alcohol with at least three terminal aldehyde groups.
- 15 18. The implant as claimed in one of claims 2 through 17, characterized in that the at least one polymer carrying aldehyde groups is partially cross-linked.
- 20 19. The implant as claimed in one of the preceding claims, characterized in that the adhesive layer has a structured surface on its outer face.
- 25 20. The implant as claimed in one of the preceding claims, characterized in that the planar support is porous and flexible, and in particular is formed from a textile material.
- 30 21. The implant as claimed in one of the preceding claims, characterized in that the support, in particular the textile support, is at least partially absorbable, in particular completely absorbable.
- 35 22. The implant as claimed in one of the preceding claims, characterized in that one face of the support is provided with at least one anti-adhesive layer which is preferably absorbable.

23. The implant as claimed in claim 21, characterized in that the anti-adhesive layer contains polyvinyl alcohol and/or carboxymethylcellulose, and in particular consists of polyvinyl alcohol.

24. The implant as claimed in one of the preceding claims, characterized in that it is designed as a hernia mesh having the adhesive layer on the face which is intended to bear on the abdominal wall, and in that the other face of the hernia mesh preferably has at least one layer which is designed as an anti-adhesive layer and prevents adhesion of body tissue to the mesh.

15 25. The implant as claimed in one of claims 1 through 22, characterized in that it is designed as a patch which has the adhesive layer on at least one face.

20 26. The implant as claimed in one of claims 1 through 22, characterized in that it is present as a tube section which is designed for connection of tubular hollow organs.

25 27. Provision of the implant as claimed in one of the preceding claims, for an internal application in an organism, in particular in the area of wounds.

28. Provision of the implant as claimed in claim 27, the planar support being connected on both faces to an adhesive layer for apposition of vertical and horizontal tissue layers, the planar implant preferably being absorbable.